RESPONSE TO COMMENTS

Corrective Action Design Permit Application
Transmittal Number: X260852
Glenview Landfill
Chelmsford, Massachusetts
November 2014

On July 31, 2014, the Massachusetts Department of Environmental Protection ("MassDEP") issued, for review and comment, a Provisional Decision approving Charter Environmental Inc.'s (Charter's) application, category BWP SW 25, Transmittal No. X260852, Corrective Action Design (CAD) for completing the closure of the Glenview Landfill in Chelmsford, Massachusetts (the "Site"). The Provisional Decision provided that comments could be submitted to the MassDEP either by mail or electronically by email and that the comments must be received by the MassDEP on or before 5:00 p.m. on August 25, 2014.

The comment period was extended twice by the MassDEP at the request of several members of the public and the Town of Chelmsford Board of Selectmen. MassDEP extended the original August 25, 2014 deadline, first to September 4, 2014 and subsequently to September 12, 2014. MassDEP received comments from six (6) people and the Town of Chelmsford Board of Selectmen ("Board of Selectmen"). A list of the Commenters and copies of the comments received by the MassDEP are attached as Attachments 1 and 2 to this Response to Comments ("RTC").

MassDEP appreciates the input from the Board of Selectmen and all those who submitted comments on the Provisional Decision and the CAD. MassDEP recognizes that municipal officials and other interested persons can provide valuable comments on a proposed CAD or other solid waste project application. That is the reason that MassDEP chose to issue its original decision on Charter's CAD application for the Glenview Closure Project as a Provisional Decision. Under the Solid Waste Regulations that govern the review of CAD designs and the issuance of decisions on such applications, MassDEP had the option of issuing either a provisional decision or a final decision.¹

The comments that MassDEP received raised several concerns that commenters have about the CAD design and the Provisional Decision. Commenters also raised concerns they have about the history of the Site, including prior actions and decisions by the MassDEP. The MassDEP considered all comments received during the Comment Period and prior to issuing the attached final decision on the CAD Application. This Response to Public Comments or RTC summarizes and responds to the comments received during the comment period.

¹ 310 CMR 19.033.

REGULATORY AND PROCEDURAL POSTURE OF THE GLENVIEW SITE CLOSURE

Because the Glenview Site has a long history, and concerns expressed by commenters raise some historical questions, we provide this brief Site history, in an effort to provide clarity to the regulatory and procedural posture of the Glenview Site.²

The Glenview Site was once used primarily as a sand and gravel pit. Located next to the City of Lowell municipal solid waste ("MSW") landfill, the Site was subjected to dumping of various wastes, including but not limited to MSW, oxide box waste from coal gasification facilities, and other wastes. Colonial Gas Company removed and addressed certain oxide box waste under the MassDEP Waste Site Cleanup program. The City of Lowell was held responsible through a Superior Court Order to remove the Lowell-related MSW from the Site. During the City of Lowell's work at the Site, test pits that were dug revealed that other waste materials remained on Site that were not the responsibility of the City of Lowell to address.

During the summer of 1997, a Glenview Site closure project was proposed and approved.³ The companies involved in that initial closure project included Mass Gravel, Inc. (MGI) and Amalgamated Transportation, Inc. (ATI). Mr. Patrick Hannon was involved with each of those entities (the "Hannon Entities") and was an operator of the Site.⁴ As part of this earlier closure project, among other things, the Hannon entities used approximately 470,000 cubic yards of contaminated soils at the Site as shaping and grading materials, as had been approved for the Glenview Site, consistent with the applicable solid waste regulations and MassDEP policies concerning the use of such contaminated soils.⁵ Soils that fit within parameters set forth in MassDEP policy are allowed to be used for shaping and grading at certain solid waste sites, but are required to be covered by a properly designed and constructed landfill cap, generally consisting of a flexible membrane liner ("FML") layer, overlain by a sand drainage layer, loam and an appropriate vegetative layer. Such a multi-layer landfill cap serves several purposes, including preventing exposure to the material under the FML and preventing rain and storm water from moving through the material below the FML into the groundwater.

The Hannon Entities failed to complete the closure of the Glenview Site. Among other things, when Hannon stopped work at the Site, a large portion of the Site was covered by FML, but the other cap components had not been installed. Over the subsequent years, the FML was subject to exposure to weather and light, raising concerns about possible degradation of the FML. The FML was subsequently damaged, first by a mattress fire on the southwest slope and then through storm events, which tore the

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² See also the Final Decision and the Fact Sheet (including documents referenced therein), as well as the Site file for a more complete history. Select documents may be found on MassDEP's web page for the Glenview Site, at: http://www.mass.gov/eea/agencies/massdep/about/contacts/glenview.html.

³ See Administrative Consent Order ACO-NE-97-4002, issued on August 14, 1997. The Town of Chelmsford was aware of and involved with the earlier closure project, and received community host fees from that project.

⁴ More details on the Hannon Entities' role at the Glenview Site can be found in the Superior Court docket in the matter of *Foshay v. Mass Gravel et al.*, Middlesex Superior Court Docket Civil Action No. 99-1554. See Findings of Fact, Discussion of Law, and Order, issued on March 21, 2006. See also the Judgment issued on April 5, 2006.

⁵ These policies are set forth in the Fact Sheet issued herewith.

FML. Eventually, much of the surface of the contaminated soils used at the Site by the Hannon entities for shaping and grading became exposed.

On April 4, 2011, Sandbanks, LLC ("Sandbanks") purchased the Site at a Sheriff's Sale. Sandbanks has arranged for Charter to complete the closure of the Site.

Because the Site has been in noncompliance with Massachusetts Solid Waste regulations, MassDEP has issued several administrative orders concerning the Site. Specifically, MassDEP issued Administrative Consent Orders to both Sandbanks (Sandbanks ACO) and Charter (Charter ACO). These enforcement orders govern the closure work and ensure that the Site comes into compliance with the applicable requirements. Among other things, these orders set forth an enforceable closure schedule and provide for the Site to be properly closed consistent with the standards and requirements in the regulations, which are designed to be protective of public health and the environment. MassDEP has also issued:

- Conceptual Closure Plan Approval, issued on November 20, 2013; and
- Interim Stockpiling Plan Approval, issued on April 25, 2014.

Charter proposed in its Conceptual Closure Plan application to use approximately 420,000 cubic yards of contaminated soils in order to be able to fund the Site's closure costs. Charter included the required information in support of its proposed estimate, and MassDEP found it to be a reasonable estimate, consistent with other projects that have been proposed to MassDEP. The Conceptual Closure Plan Approval, which was issued on November 20, 2013, was not appealed by any person and the applicable appeal period has expired. The Conceptual Closure Plan Approval was referenced in and attached to the Charter ACO as an exhibit.

Charter's Corrective Action Design Permit Application is subject to review under the Solid Waste Facility Regulations at 310 CMR 19.000, specifically the provisions of 310 CMR 19.112 (Landfill Final Cover Systems) and 310 CMR 19.151 (Corrective Action Requirements).

RESPONSE TO COMMENTS

CAD Design Comments

TRAFFIC IMPACTS

Comment:

All of the commenters expressed concern over the impact of truck traffic from the project on the traffic in the area of the Site including, but not limited to, Stedman Street and Drum Hill Road. The commenters asked that MassDEP extend the public comment until Charter completed the traffic evaluation it had agreed to provide the Board of Selectmen.

MassDEP Response:

MassDEP acknowledges that Drum Hill Road is one of the most heavily travelled roads in Chelmsford. MassDEP does not have independent jurisdiction under its solid waste regulations relating to traffic concerns, but in the event that a project is subject to review under the Massachusetts Environmental

⁶ See the Fact Sheet for list of related documents.

Policy Act ("MEPA"), MassDEP does incorporate into its approvals any traffic findings or conditions required by the Executive Office of Energy and Environmental Affairs ("EOEEA") through its MEPA process.

In an October 23, 2013 letter to EOEEA's MEPA Office ("MEPA Office"), Charter requested an advisory opinion pursuant to 310 CMR 11.01(6) whether review of the Glenview Site closure project was required by the MEPA regulations. In a November 15, 2013 letter to Charter, the MEPA Office concurred that the project did not trigger any thresholds under the MEPA regulations including, without limitations, any environmental or traffic studies under MEPA. As a result, no traffic evaluation was required for the Site.

Charter, in an April 11, 2014 response to the Town's comments on the ISP permit, committed to conduct an evaluation of the impact of the additional truck traffic on the existing traffic in the area and make recommendations for any traffic related mitigations. Charter engaged a traffic engineer who completed counts of traffic immediately prior to the commencement of ISP operations on June 23, 2014. The results of these counts were provided to the Town.

Charter reviewed the proposed traffic evaluation with representatives of the Town at a site meeting held on June 26, 2014. At that meeting, it was agreed to by the Town officials that the evaluation of traffic impacts be postponed until September when traffic levels would return to post-summer levels. This information was relayed to the Town and the MassDEP in a letter dated August 29, 2014, from Charter's engineer, Langdon Environmental.

On October 16, 2014, Charter provided the results of the traffic evaluation, prepared by Green International Affiliates, Inc. of Westford, Massachusetts ("Green International") to the Town and the MassDEP.

Green International concluded, based on the modeling and field observations presented in the report, that traffic generated by hauling activity related to the project resulted in a minimal impact on traffic in the area and that the use of Drum Hill Road as the haul route does not create new traffic delays or significantly add to current traffic delays. Green International also concluded that Drum Hill Road remains the better route to use. Green International recommended in the report that Charter:

- Maintain existing site related signs that highlight the access drive for the truck drivers entering and exiting the Site; and
- Install a sign along the westbound approach of Westford Street, preceding the driveway to the Site, warning drivers of "TRUCKS ENTERING".

MassDEP has incorporated these recommendations into the final decision on the CAD.

In addition, MassDEP notes that each driver entering the Site must review and agree to abide by the Truck Rules for entering and exiting the Site. Charter has provided a copy of the Truck Rule form to MassDEP for the Site file. In addition, Charter has repeatedly stated that trucks from the Site will not utilize Stedman Street. Consistent with this commitment from Charter, MassDEP has incorporated a provision in the final decision that prohibits truck from entering or exiting the Site from Stedman Street.

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⁷ MassDEP understands that Charter and the Board of Selectmen are scheduling a meeting to present and discuss the traffic evaluation.

TESTING OF SOIL

Comment:

MassDEP also received comment regarding the adequacy of the characterization and testing of soil accepted at the Site for use as grading and shaping material including that the soil *testing is* "infrequent". Ms. Laurie Myers requested that "... MassDEP require Charter Environmental to allow the Chelmsford Board of Health access to the Glenview site to conduct semi monthly soil testing to ensure the material meets all criteria and is not a danger to the residents of Chelmsford..."

MassDEP Response:

Charter has outlined a detailed protocol for testing of the grading and shaping materials including confirmatory testing. This protocol is in accordance with MassDEP regulations, guidance documents and is similar to the protocols implemented at other similar projects. Condition No. 6 of the Final CAD Decision details the requirements for confirmatory testing of the soils delivered to the Site. MassDEP does not believe there is a need for additional testing of the grading and shaping materials beyond those outlined in the CAD permit application.

MassDEP notes that the Town Health Agent, Mr. Richard Day, attends the monthly random operations inspections of the Site with the professional engineer from Langdon. At those monthly inspections, Mr. Day could be present when the random samples of the grading and shaping materials delivered to the site are collected for analysis. In addition, the MassDEP's Final CAD Decision and the Charter ACO do not limit any existing authorities that the Board of Health has to conduct inspections and collect and analyze samples of grading and shaping material from the Site.

Section 310 CMR 19.007 <u>Access Rights of the Department</u> provides MassDEP with the right to sample the grading and shaping material at the any time.

In addition, MassDEP notes that the Charter ACO, among other things, requires the following:

- Charter and the Engineer of Record shall conduct routine inspections of the Site;
- Construction Monitoring Reports shall be prepared and submitted to the MassDEP by the 15th of each month, with copies to the Boards of Health of the Town of Chelmsford and the City of Lowell; and
- Charter shall notify the MassDEP and the Boards of Health of the Town of Chelmsford and the City of Lowell of:
 - The occurrence of any activity at the Site that results in off-site nuisance conditions or a threat to the public health, safety, welfare or the environment;
 - The details of any incident that results in the response of emergency personnel to the Site (such as, police, fire, OSHA, etc.); and
 - The receipt by Charter of any complaint of off-site nuisance conditions attributed to the Site.

LANDFILL CAP MATERIALS

Comment:

A comment was received in an email dated September 12, 2014 from Ms. Laurie Myers asking "[w]ill the contents of the cap material contain similar contaminated soil?"

MassDEP Response:

As outlined in the CAD permit application, the cap consists of three soil layers and a flexible membrane liner (FML) capping layer. One of the layers shown as the bedding layer in the CAD permit application will be constructed directly below the FML and may be constructed using specified materials similar to those being accepted as grading and shaping materials at the Site. This is consistent with the prior approval for the Site and other similar projects approved by MassDEP. The two soil layers above the cap (known as the drainage layer and the vegetative topsoil layer) will be tested in accordance with the program outlined in the CAD permit application and are required to be below appropriate regulatory standards demonstrating that they are appropriate.

ASSESSMENT OF EXISTING CAP TO REMAIN

Comment:

A commenter raised a question about Condition 12 of the Provision and Decision, regarding Existing Landfill Cap Augmentation. Condition 12 provides that, "Charter shall perform a detailed investigation of the portion of the existing landfill cap that Charter proposes to augment to comply with MassDEP Solid Waste Regulations." The commenter asked whether this detailed investigation been completed.

MassDEP Response:

The majority of the prior cap (15 acres) is no longer usable and is required to be replaced by MassDEP Regulations. Condition 12 addresses an area of approximately 3 acres of the existing cap that Charter proposes to evaluate and determine if the existing cap can remain. It is a condition of the approval of the CAD and becomes effective upon issuance of this Final CAD Decision.

Charter has not completed this assessment yet. Based on preliminary discussions with Charter's engineer, and MassDEP's observations, it appears that the work required for most of the three acres proposed for the assessment will exceed the estimated cost proposed by Charter. However, MassDEP notes that Charter is responsible for completing a final cap over these areas as approved by MassDEP, regardless of the amount of work required or the cost of that work.

COMPREHENSIVE SITE ASSESSMENT

Comment:

There were comments received from Ms. Laurie Myers and others regarding the ongoing assessment of the presence of cyanide in the groundwater at the Site and the capping project. Mr. Patrick Hannon commented that "[t]he department is being inconsistent in regard to existing conditions at the site, recently in Dartmouth at Cecil Smith Landfill the department required the proponent to install groundwater monitoring wells and establish existing conditions."

MassDEP Response:

The presence of cyanide at the Site is from the historic disposal of iron-oxide waste from coal gasification facilities and is not related to the grading and shaping materials either placed by the prior operator or Charter. Charter is required by the Charter ACO to complete the assessment of the presence of cyanide in the groundwater on the Site, which assessment was started by the previous operator.

Prior to the MassDEP and Charter executing the Charter ACO, Charter reviewed the existing groundwater data, including data generated during the original closure project by or for the Hannon Entities. Charter then conducted an "initial" sampling of the groundwater in April 2013. On September 9, 2014, the MassDEP approved Charter's scope of work for completing the Supplemental Comprehensive Site Assessment ("SCSA") of the Site. This assessment includes the installation of additional monitoring wells and an associated sampling program. The work will be summarized in a SCSA Report to be submitted to MassDEP for review and comment.

It is worth noting that the completion of environmental assessment activities ("Comprehensive Site Assessments") at the closure of inactive landfills and dumping grounds generally proceed in parallel with the placement of grading and shaping material. As discussed previously, Charter is completing the Comprehensive Site Assessment of the Site that was initiated but not completed by the prior operator of the Site.

HEIGHT/SIZE OF THE LANDFILL

Comment:

Commenters questioned and expressed concern over the increase in the height of the Site shown in the CAD. Representative of these is the Chelmsford Board of Selectmen's comment that:

"An increase of approximately 47 feet in height over the current elevation of the landfill will be detrimental to the aesthetics of the Town of Chelmsford. Based upon the renderings from the balloon test, we believe the proposed height of the landfill will create a new skyline of Chelmsford from Route 3, as well as other areas in our town."

MassDEP Response:

The grades presented in the CAD permit application are the same as those shown on the Conceptual Closure Plan approved by MassDEP on November 20, 2013, and the Interim Stockpile Plan (ISP) approved by MassDEP on April 25, 2014. The Conceptual Closure Plan was referenced in and incorporated as Exhibit 1 to the Charter ACO, issued on March 21, 2014.

As discussed in MassDEP's response to comments in the April 25, 2014 Approval of the ISP, the grades and final elevation approved by MassDEP in the CAD and the Conceptual Closure Plan are based on the receipt and placement of 420,000 cubic yards of grading and shaping material necessary to finance the completion of the closure of the Landfill. During review of the Conceptual Closure Plan application, MassDEP reviewed Charter's estimate and determined that it is a reasonable estimate. As noted below, there was no appeal of MassDEP's approval of the Conceptual Closure Plan, and the applicable appeal period has expired.

In July 2014, Charter conducted a balloon test to show the proposed final elevation of the Site versus the current conditions and prepared renderings of the final Site. The balloon test and renderings showed that the Site would only be visible from limited areas at the bridge crossing Route 3 at the start of Drum

Hill Road and along Parkhurst Road (along public ways), from limited areas in existing parking lots along Drum Hill Road and areas immediately adjacent to the Site.

In addition, the final elevation of the Site of approximately 212 feet⁸ as shown in the Conceptual Closure Plan and CAD, is approximately 8 feet lower than the maximum elevation of approximately 220 feet of the adjacent City of Lowell Landfill.

Based on the location of the Glenview Site, its proximity to the Lowell Landfill, and the results of the balloon tests and renderings, MassDEP does not believe that height of the Landfill will radically alter the aesthetics of the area.

Significantly reducing the height of the Site would require extending the footprint of the landfill (that is increasing the area of the landfill) and/or reducing the amount of grading and shaping material utilized for the closure. Increasing the footprint of the landfill is not practicable due to constraints such as maintaining and meeting applicable setbacks to wetland areas on the property. As discussed above, the volume of grading and shaping material is the amount necessary to finance the closure and has been previously approved in the Conceptual Closure Plan approval and is incorporated in a binding enforcement document, the Charter ACO.

Balloon Test

Comment:

One commenter questioned why Charter conducted the Balloon Test in July 2014 rather than in the fall of September 2013, when the Balloon Test was requested by the Board of Selectmen.

MassDEP Response:

The Board of Selectmen in its April 4, 2014 comments to MassDEP on the ISP expressed concern about the impact of the increased height of the landfill on the visibility of the landfill by nearby residents and businesses. The Board urged the MassDEP to require Charter to perform a balloon test to evaluate this impact prior to issuing a final decision on the project. Charter expressed its willingness to conduct such a balloon test. As a result, MassDEP required in Condition 11 of the ISP approval that Charter include the rendering that Charter committed to provide the Board of Selectmen as part of the balloon test. MassDEP cannot speak to the question about the dates of the Balloon Test, but notes that Charter has complied with Condition 11 regarding the Balloon Test.

Area of plateau

Comment:

One commenter asked how large the plateau will be in acres when completed.

MassDEP Response:

The plateau at the top of the Site will be approximately 2.7 acres when completed and the footprint of the landfill approximately 18 acres.

⁸ Elevation based on North American Vertical Datum 1988 (NAVD 1988).

POST-CLOSURE USE

Comment:

The Board of Selectmen, Ms. Meyers, Mr. Luskin, and Mr. Farley commented that Charter should include the post-closure use of the Site in the CAD and that it should be part of MassDEP's final decision. The Board of Selectmen stated, in part that:

"Since the post-closure use, including security and on-going testing to ensure safety of our Town, greatly impacts our Town, we request that the Board of Selectmen are notified of this written document of post-closure use and the public is allowed time for a response before a final decision is made from the DEP."

MassDEP Response:

The CAD, as approved by MassDEP, provides for a passive post-closure use of the Site with a final grassed surface/open meadow and no active post-closure use. Sandbanks, the property owner, has not proposed any active post-closure use of the Site.

As a result, any proposal to change the passive post-closure use of the Site, such as but not limited to the construction of a solar photo voltaic (PV) facility, would require the submittal of an application for review and approval by MassDEP pursuant to 310 CMR 19.143 <u>Post-closure Use of Landfills</u>. Copies of any such application to change the post-closure use of the Site from the passive post-closure proposed in the CAD and approved by this decision must be provided to the Town and would be subject to the public comment and appeal provisions of the permit procedures at 310 CMR 19.033.

POST-CLOSURE MONITORING AND MAINTENANCE

Comment:

MassDEP also received comments on the future long-term monitoring and maintenance requirements that will apply to the Site including a proposed Financial Assurance Mechanism ("FAM").

MassDEP Response:

After completion of the closure and issuance of a Determination of Closure by the MassDEP pursuant to the requirements of 310 CMR 19.140(6) <u>Completion of Closure</u>, the Site must comply with 310 CMR 142 <u>Landfill Post-closure Requirements</u>. As set forth in the regulations, and subject thereto, the post-closure period extends for a period of 30 years and requires in part, that Sandbanks:

- Maintain the integrity of the final cover system (the cap);
- Monitor and maintain the environmental systems for surface water, groundwater, and air quality; and
- Take corrective actions to remediate and/or mitigate conditions that would compromise the integrity of, and purpose for, the final cover.

The post-closure maintenance and monitoring requirements for the Site will be specified in the final Post-closure Monitoring and Maintenance plan, subject to the review and approval by the MassDEP. Paragraph 9.F. of the Sandbanks ACO requires, among other things, that Sandbanks submit a cost estimate and financial assurance mechanism for complying with the post-closure requirements of 310 CMR 19.142 no later than the earlier of February 1, 2017 or the date of submittal of the Closure

Certification Report to MassDEP by Charter. Currently, Charter is conducting environmental monitoring at the Site pursuant to the SCSA approved by MassDEP on September 9, 2014 (see Comprehensive Site Assessment, above). Charter is required to continue such monitoring until closure is certified and approved.

FINANCIAL ASSURANCE MECHANISM FOR CLOSURE

Comment:

Patrick Hannon, the previous operator of the Site, commented that the FAM established by Charter of \$2,982,000 is not sufficient stating, in part, "if soils are imported and the project fails for some reasons the FAM is only sufficient to fund a standard cap. The FAM will not fund placing the stockpiled soil, testing of the soil, and redesigning of the cap to a lower area. The FAM does not cover any additional work that may be required if the project fails. If Charter needs to generate \$7,000,000 in revenues to cover the "true" project costs as their consultant stated [at the Board of Selectmen meeting] the FAM should be increased to \$7,000,000."

MassDEP Response:

Pursuant to paragraph 8.H. of the Charter ACO, Charter established a FAM in the amount of \$2,982,000 to assure completion of its obligations under the Charter ACO including, but not limited to:

- Construction of the final cap that consists of –from top to bottom– the vegetative support layer, the sand drainage layer, the impermeable layer (Flexible Membrane Layer), bedding layer, and related appurtenances (storm water controls etc.);
- Preparation of the final closure certification report; and
- Submittal of a Comprehensive Site Assignment (CSA) for the Site.

Charter is not obligated under the Charter ACO to perform post-closure maintenance or monitoring of the Site after completion of the cap. In the event that Charter defaults on its obligations to complete the closure pursuant to the Charter ACO, MassDEP may access the FAM to complete the required activities Charter failed to complete pursuant the Charter ACO. As with cost estimates for similar projects, the FAM was not required to include the cost for the acceptance and placement of additional shaping and grading material at the Landfill.

Based on contract bids for the closure of both operating and inactive landfills in the last few years that are available to MassDEP, the closure estimate presented by Charter is reasonable and within the range of estimates for such work. Therefore, the FAM established by Charter has been determined by the MassDEP to be sufficient to complete the closure of the Site as required by the Charter ACO. In addition, the Charter ACO requires that Charter periodically review and adjust the FAM amount pursuant to 310 CMR 19.051.

MISCELLANEOUS COMMENTS

MassDEP received several comments regarding the Site that relate to prior events and prior actions by the MassDEP. It should be noted that these comments in many instances relate to prior actions and decisions that were subject to public comment and for which the applicable appeal periods have passed. These include, without limitation, comments on the Conceptual Closure Plan and the ISP.

WHY IS THE SITE BEING CAPPED AS A LANDFILL

A number of commenters submitted comments asking why the Site requires capping as a landfill under 310 CMR 19.000 the Massachusetts Solid Waste Regulations.

Comment:

Why is the site now a landfill rather than a dumping ground?

MassDEP Response:

MassDEP acknowledges that the various terms and definitions for different types of solid waste facilities in Massachusetts can be a source of confusion. As set forth herein, the Glenview Site is a former dumping ground, which was previously approved for closure by the Hannon Entities pursuant to MassDEP regulations and policies. The terminology can appear to create a distinction, but in this case, it is a distinction without a difference with regard to the regulatory requirements to properly close the Site.

A "Dumping Ground" is defined pursuant to 310 CMR 19.006 as "...a facility or place used for the disposal of solid waste from one or more sources which is not established or maintained pursuant to a valid site assignment or permit in accordance with M.G.L. c. 111, § 150A, 310 CMR 16.00: Site Assignment Regulations for Solid Waste Facilities or 310 CMR 19.000." The Glenview Site was historically operated for the disposal of solid waste and was never permitted and is therefore considered a "Dumping Ground." In correspondence from the MassDEP the Site has been variously referred to, including but not limited to, the Glenview Sand & Gravel Property, the Glenview Dumping Ground, and the Glenview Landfill.

Dumping grounds are subject to the regulatory requirements applicable to a landfill including, but not limited to, Part II: <u>Landfill Design and Operational Standards</u> of 310 CMR 19.000 that include without limitation the following requirements.

- 310 CMR 19.112 Landfill Cover Systems,
- 310 CMR 19.132 Environmental Monitoring Systems,
- 310 CMR 19.140 <u>Landfill Closure Requirements</u>,
- 310 CMR 19.141 Notice of Landfill Operation,
- 310 CMR 19.142 <u>Landfill Post-closure Requirements</u>,
- 310 CMR 19.143 Post-closure Use of Landfills,
- 310 CMR 19.150 Landfill Assessment Requirements, and
- 310 CMR 19.151 Corrective Action Requirements.

Some relevant Site history is described herein and in the Charter ACO and Sandbanks ACO. Circa June 1997, Mass Gravel, Inc.⁹ requested that MassDEP confirm that excavated soil from urban construction projects, including soil generated from the Central Artery Project/Third Harbor Tunnel Project (Central Artery or CAT), could be used to perform the closure of the Site. As reflected in the Final Decision, Fact Sheet and Site file, the Hannon Entities were permitted pursuant to MassDEP policies and regulations to conduct the Site closure using the Central Artery materials. The Hannon Entities commenced the closure project at the Glenview Site, bringing in approximately 470,000 cubic yards, but did not complete the project.

Based on the past uses and history of the Site, including the prior closure project, the Glenview Site must be closed in compliance with the Landfill Closure requirements.

Comment:

The previous owner claims there are no contaminated soils on the site and capping is not required. Why does it need a cap/closure, why no risk assessment?

MassDEP Response:

See the prior MassDEP response regarding Dumping Grounds and Landfills.

The prior project conducted at the Site between 1998 and 2004 included the receipt and placement of contaminated soils in accordance with MassDEP's policies and regulations. This included over 470,000 cubic yards of soils from the Central Artery project. The soils previously accepted by the prior operator are the same types of materials as the grading and shaping materials that are to be accepted by Charter under the CAD permit. These soils were tested extensively prior to their receipt at the Site and the MassDEP does not believe any testing of the existing soils placed by the prior operator is necessary.

Under MassDEP policies and regulations that were developed based on extensive assessment of the type of soils already in-place at the Site, these soils are acceptable for placement at inactive landfill sites but require construction of a final cap that meets the requirements of the current MassDEP regulations. The requirement to cap this type of soil has been required by MassDEP and successfully implemented at numerous closure projects throughout the Commonwealth.

Because the cap installed by the prior operator was never completed, monitored or maintained, the cap has failed. Significant portions of it have been removed and there is substantial erosion of the contaminated soils into the surrounding wetland resource areas.

With respect to risk assessment requirements, MassDEP notes that the CAD as proposed meets the criteria for approval set forth 310 CMR 19.112 (Landfill Final Cover Systems) and 310 CMR 19.151 (Corrective Action Requirements), and does not require a risk assessment. ¹⁰ In short, the Landfill Cap that will be constructed serves to prevent exposures to the materials below the cap and to prevent storm water infiltration through the cap. Under the applicable regulations, such a landfill cap is considered a presumptive remedy. Therefore, because the Landfill Cap that will be constructed at the Site is a presumptive remedy, no risk assessment is required for the Site at this time.

⁹ As noted above, MGI is one of the Hannon Entities.

¹⁰ Charter will complete the Comprehensive Site Assessment, as required by MassDEP in the Charter ACO. See the RTC section concerning the Comprehensive Site Assessment, above.

AGREEMENT BETWEEN CHARTER AND SANDBANKS

Comment:

MassDEP received a comment from Mr. Patrick Hannon dated August 28, 2014 that provided Mr. Hannon's summary of his personal involvement with the prior abandoned project. The comment also requested that MassDEP obtain a copy of the agreement between Charter and Sandbanks to implement the project.

MassDEP Response:

The comments from Mr. Hannon characterizing his prior involvement with the Site are not relevant to the CAD application. With respect to the request to obtain a copy of the agreement between Charter and Sandbanks to implement the project, we note that Charter has met its ACO requirements to provide to MassDEP a certification from Charter that Charter had obtained approval from Sandbanks to implement the project. MassDEP does not require any further submissions from either Charter or Sandbanks on this matter.

SUBMISSION OF FINANCIAL INFORMATION

Comment:

MassDEP received a comment from Mr. Patrick Hannon dated August 28, 2014 regarding his desire to obtain and review financial information relating to the incoming grading and shaping materials and project costs.

MassDEP Response:

The submission of such information has not typically been required by MassDEP for this type of project. MassDEP further notes that Charter submitted financial analysis for the project as part of its Conceptual Closure Plan, which was approved by MassDEP on November 20, 2013.

PRIOR FINANCIAL ASSURANCE MECHANISM

Comment:

MassDEP received an email dated September 9, 2014 from Mr. Jack Luskin providing several questions about the Financial Assurance Mechanism or FAM, which was provided by the prior operator and is currently held by MassDEP.

MassDEP Response:

The previous closure project had a FAM for the closure and/or post closure of the site in the amount of \$500,000. The FAM consisted of a Standby Trust and a bond. Such bonds are typically issued for a period of time. After the bond issuer notified the MassDEP, Amalgamated Transportation, Inc., Hannon and the Trustee that it was declining to renew the bond, Amalgamated failed to provide a substitute bond or other allowable funding for the FAM. As a result, in 2005 MassDEP sent the previous operator a Notice of Intent to Draw upon the Bond and subsequently a Default Notice. Ultimately, the funds secured by the bond were liquidated and the cash was placed in the Trust.

In 2007 MassDEP hired Shaw Environmental to perform a detailed construction cost estimate for the completion of the final closure of the site. Shaw estimated the cost to complete the closure based on the conditions at that time would be \$1,294,000. There were insufficient funds for MassDEP to close the Site at that time. At that time, the Site was in fairly stable condition. The value of this Trust as of today is approximately \$540,000. MassDEP continues to hold this FAM for its original intended purposes, as set forth in the Trust and the regulations.

MassDEP was contacted on a number of occasions by Mr. Patrick Hannon about possible plans to partner with one entity or another to complete the closure of the Site. MassDEP participated in discussions with Hannon and possible partners on a number of occasions, over a number of years, with the goal of getting the stalled closure restarted and completed.

Based on current conditions, the estimate to finish the closure of the Site is estimated to be \$2,982,000. The MassDEP has secured a closure FAM from Charter Environmental in the amount of \$2,982,000. A copy of Charter's FAM and related documents are maintained as part of the Site file.

With regard to the cyanide issue, the extent of any work required to remediate cyanide in groundwater is currently not known. That is why MassDEP has required Charter in the Charter ACO to complete the assessment of the cyanide in groundwater. Charter's assessment should lead to an understanding of the contamination as well as the appropriate monitoring and remediation (if any, that would be required under the applicable cleanup standards), including projected costs thereof. To the extent that those costs are ongoing operations and monitoring (O&M) costs, the O&M cost estimates will be included in the Post-closure Cost Estimate, and Sandbanks will be required to provide an appropriate FAM that will include such costs. The results of Charter's assessment work will be summarized in a SCSA Report to be submitted to MassDEP for review and comment.¹¹

COMMENT PERIOD

Comment:

Many of those who commented asked for additional time to research and make comments on the CAD and Provisional Decision.

MassDEP Response:

MassDEP recognizes that municipal officials, citizens and other interested persons can provide valuable comments on a proposed CAD or other solid waste project application. That is the reason that MassDEP chose to issue its original decision on Charter's CAD application for the Glenview Site as a Provisional Decision. Under the Solid Waste Regulations that govern the review of CAD designs and the issuance of decisions on such applications, MassDEP had the option of issuing either a provisional decision or a final decision.¹²

Prior to submitting the application, Sandbanks, Charter, and their representatives had talked to and consulted with various Chelmsford officials and departments about the planned closure project, on a number of occasions. Charter provided real-time copies of the Conceptual Closure Plan application and

 $^{^{11}}$ The SCSA will also be provided to the Town of Chelmsford at the time it is submitted to MassDEP.

¹² 310 CMR 19.033.

the Interim Stockpiling Plan application to the Town. MassDEP provided the Town with real-time copies of the Provisional Decisions and the Final Decisions for each of those applications.

MassDEP notes that Charter provided a copy of the CAD application and plans to the Town on or around May 16, 2014, at the time it was submitted to MassDEP. MassDEP issued the Provisional Decision on July 31, 2014 and provided a 30-day comment period. The original comment period ended at 5:00 p.m. on August 25, 2014.

The Chelmsford Board of Selectmen scheduled a Glenview Site project status update for its August 25, 2014 meeting (the original comment deadline). MassDEP extended the comment period, in response to requests and in light of the Board's agenda item, from August 25, 2014 to September 4, 2014. At its August 25th meeting, the Board put the project on its September 8, 2014 agenda, to discuss draft comments that the Town would submit to MassDEP. Based on the Board's schedule and in response to other requests for extension, on August 27, 2014, the Department made a second extension of the deadline to Friday, September 12, 2014.¹³

As noted above, the closure project, which is being conducted by Charter pursuant to its agreement with the Sandbanks, has been in the public purview for a substantial amount of time. The CAD application that was under review and proposed to be approved in the Provisional Decision was provided to the Town and made available to interested persons when filed in May 2014. MassDEP chose to issue the approval as Provisional for the purpose of obtaining public review and comment. MassDEP appreciates that many members of the public and their elected representatives have submitted comments, which have been considered.

¹³ Copies of the MassDEP's extensions of the comment deadlines are maintained in the Glenview Site file.